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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,623	06/04/2007	Masakazu Ando	5417-0128PUS1	2870
2292 7590 01/21/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER BENITEZ, JOSHUA				
ART UNIT 2829		PAPER NUMBER		
NOTIFICATION DATE 01/21/2009		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

### Office Action Summary

**Application No.**

10/568,623

**Applicant(s)**

ANDO ET AL.

**Examiner**

JOSHUA BENITEZ

**Art Unit**

2829

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 3, 8, 12 and 14-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-6, 9, 10 and 13 is/are rejected.
- 7) ☒ Claim(s) 2, 7 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 February 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 02/16/2008 & 05/16/2008
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election of species 1, reading on claims 1, 2, 4-7, 9-11 and 13 in the reply filed on 09/24/2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 3,8,12 and 14-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 09/24/2008.

***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

4. The information disclosure statements (IDS) submitted on 02/16/2008 and 05/16/2008 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4-6 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Wohlfarth et al (U.S. Patent No. 6,484,117).

In re claims 1, 6 and 13, Wohlfarth '117 discloses in figures 4-5 a temperature control device and method for an electronic device testing apparatus for conducting a test on an electronic device to be tested by sending a test pattern to the electronic device to be tested and detecting a response pattern thereto, comprising:

a temperature adjusting device (48) provided to contact with said electronic device to be tested; and

a power control means (50) for controlling power consumption of said temperature adjusting device so that total power consumption of said electronic device by said test pattern and power consumption of temperature adjusting device becomes a constant value (col. 5, lines 20-63).

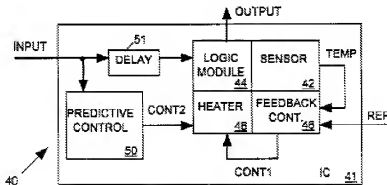


FIG. 4

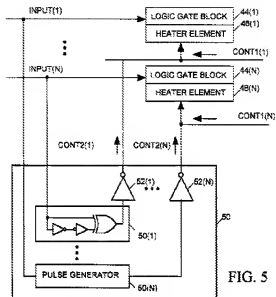


FIG. 5

Regarding claims 4-5, Wohlfarth '117 discloses wherein temperature change characteristics by a power consumption of said temperature adjusting device are close to those by a power consumption of said electronic device to be tested (col. 6, lines 5-10).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gray et al (U.S. Patent No. 6,204,679) in view of Wohlfarth '117.

As for claim 9, Gray '679 discloses an electronic device testing handler (col. 1, lines 23-67; col. 2, lines 1-7), comprising:

a pusher for pressing an electronic device to be tested against a contact terminal, to which a test pattern is input (col. 1, lines 55-58); and

a temperature adjusting device provided to said pusher so as to contact with said electronic device to be tested (col. 1, lines 59-66).

Gray '679 does not specifically disclose wherein a power consumption of said temperature adjusting device so that total power consumption of said electronic device by said test pattern and power consumption of temperature adjusting device becomes a constant value.

However, Wohlfarth '117 does teach wherein a power consumption of said temperature adjusting device so that total power consumption of said electronic device by said test pattern and power consumption of temperature adjusting device becomes a constant value (col. 5, lines 20-63).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided the handler as taught by Gray et al with a power consumption of said temperature adjusting device so that total power consumption of said electronic device by said test pattern and power consumption of temperature adjusting device becomes a constant value as taught by Wohlfarth et al in order to provide an improved temperature compensation system that quickly responds to changes in input signal.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wohlfarth '117 in view of Gray et al (U.S. Patent No. 6,204,679).

With respect to claim 10, Wohlfarth '117 discloses an electronic device testing apparatus, comprising:

a test pattern generation means (50, fig. 5) for generating a predetermined test pattern;

a test pattern transmission means for transmitting a test pattern generated by said test pattern generation means to a contact terminal;

inherently, a determination means for evaluating said electronic device to be tested based on a response to said test pattern, since element 50 adjusts the input according to the detected variations (col. 5, lines 41-50) ; and

a power control means (50) for controlling power consumption of said temperature adjusting device so that total power consumption of said electronic device by said test pattern and a power consumption of temperature adjusting device for contacting with said electronic device becomes a constant value (col. 5, lines 20-63).

Wohlfarth '117 does not specifically disclose the limitation of "against which a terminal of an electronic device to be tested is pressed".

However, Gray '679 does teach a test pattern transmission means for transmitting a test pattern to a contact terminal, against which a terminal of an electronic device to be tested is pressed (col. 1, lines 42-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the apparatus as taught by Wohlfarth et al with

pressing a terminal of an electronic device to be tested in order to provide electrical connection with the device being tested in an automated test system.

***Allowable Subject Matter***

7. Claims 2, 7 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 2, the specific limitations of "a power consumption pattern canceling portion for generating a power consumption cancelling pattern for canceling a power consumption pattern in said electronic device to be tested; and a power consumption pattern transmission portion for sending power consumption cancelling pattern to said temperature adjusting device" in the combination as claimed are neither anticipated nor made obvious over the prior art made of record.

As for claim 7, the specific limitations of "generating a power consumption cancelling pattern for canceling a power consumption in said electronic device to be tested; and Transmitting said power consumption canceling pattern to said temperature adjusting device" in the combination as claimed are neither anticipated nor made obvious over the prior art made of record.

With respect to claim 11, the specific limitations of "a power consumption pattern canceling portion for generating a power consumption cancelling pattern for canceling a



power consumption pattern in said electronic device to be tested; and a power consumption pattern transmission portion for sending power consumption cancelling pattern to said temperature adjusting device" in the combination as claimed are neither anticipated nor made obvious over the prior art made of record.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Takahashi et al (U.S. Patent No. 6,111,421) discloses a probe method which inspects the electrical characteristics of an object to be inspected by bringing electrodes of the object to be inspected and probes of a probe card into contact with each other.

Maeng et al (U.S. Patent No. 6,313,652) discloses a test and burn-in apparatus for semiconductor chip package devices, an in-line system which includes the test and burn-in apparatus, and a test method which employs the in-line system.

Maggi et al (U.S. Patent No. 6,861,860) discloses an integrated circuit burn-in system including an IC and a tester, a heater and burn-in circuitry.

Furukawa et al (U.S. Patent No. 7,301,359) discloses a testing apparatus and method for judging whether or not a device under test is defect free based on power supply current of the device under test.

Takeda et al (U.S. Patent No. 5,473,259) discloses an IC tester configured for simultaneously test a plurality of test ICs, each of the test ICs includes a temperature sensor part for detecting the temperature of the test IC itself.

lino et al (U.S. Patent No. 5,568,054) discloses a probe apparatus having a burn-in test function including an apparatus body, a probe card having a plurality of probes, for causing the plurality of probes to electrically contact a semiconductor wafer, a tester for measuring the electrical characteristics of the semiconductor wafer, heating and cooling mechanism for applying a thermal stress to test target chips.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA BENITEZ whose telephone number is (571)270-1435. The examiner can normally be reached on M-Th, 7:30-5:00; F, 7:30-4:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha Nguyen can be reached on 571-272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. B./  
Examiner, Art Unit 2829  
January 3, 2009

/Ha T. Nguyen/  
Supervisory Patent Examiner, Art Unit 2829